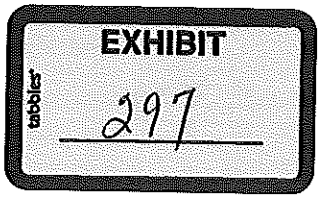


Connecticut Water Works Association
Working for Quality Water

February 4, 2010

Paul Stacey
Bureau of Water Protection and Land Reuse
State Department of Environmental Protection
79 Elm Street
Hartford, CT 06106

Re: Proposed Stream Flow Regulations

Dear Mr. Stacey:

Although the Connecticut Water Works Association (CWWA) supports the underlying intent of Public Act 05-142 – to develop balanced stream flow regulations that protect the state's aquatic life while providing for the needs of public health and safety, economic development and agriculture – we strongly oppose the regulations as drafted.

The need for balanced regulations is articulated very clearly in both the statute itself and the legislative history. Based on our analysis of the impact of the proposed regulations on public water supplies, it is apparent that the proposed regulations do not achieve that balance. The ramifications of failing to achieve the appropriate balance on the public health and safety of our citizens and the economic viability of our business community – on all segments of our society - are severe.

In fact, under the proposed regulations, many communities throughout Connecticut will simply not have the water to meet the needs of their existing residents and businesses. Many systems will see a 10-40% decrease in their safe yield –a dangerous drop in water supplies. These communities may also face moratoriums on new water service connections, halting economic development and construction in those areas. Other areas will struggle with recurring water use restrictions that can be disruptive for both residents and businesses that depend on reliable public water supplies in their day-to-day operations.

Moreover, the cost of complying with the proposed regulations will be extremely burdensome on water utility customers. Modifying dams and other infrastructure, developing new sources of water supplies, performing real-time flow monitoring and other capital and operational costs will run into the hundreds of millions of dollars. These costs will be incurred across the state even

though, according to DEP's own data, less than 1% of the rivers in this state have demonstrated flow problems.

Also troubling is the lack of certainty that public water suppliers and our customers face regarding the actual impact of the proposed regulations. Until a basin is classified, we have no way of accurately assessing the actual impact on safe yield, margin of safety, the cost and its impact on water rates. Although many utilities prepared an analysis assuming that the system would be in a Class 3 basin, the impact would be considerably greater if the basin is subsequently classified as Classes 1 or 2.

Based on the cost estimates of just eleven utilities, costs for making modifications to dams, distribution systems and other structures would range from $25 to $60 million and costs for replacing lost supply by developing new wells and reservoirs would range from $170 to $200 million, assuming a Class 3 basin classification. In addition, companies would see a sizable increase in staffing costs to monitor flows, make releases and perform other compliance tasks. The impacts on individual customers' rates would depend on the number of customers served by the utility, other capital needs of their systems, and the utility's access to capital.

Although the proposed regulations allow DEP to approve a variance, there are no guidelines included in the regulations that give water companies any indication of whether they would receive a variance.

CWWA also believes that the application of stream flow regulations to groundwater supplies was never contemplated, as evidenced by a reading of the statute and the legislative history. Of significant concern are the numerous water supply systems that rely heavily on groundwater supplies to meet customer needs whose water supplies are decimated under the proposed regulations. The implications of a groundwater rule that severely restricts withdrawals during the peak demand season – when alternative supplies and storage are not available – are especially troubling.

Compliance with the regulations will be extremely costly and the current structure appears to drive all those costs towards the public water suppliers and ultimately to their customers and the communities they serve. As a matter of public policy, the issue of cost fairness and equity needs to be assessed and other options more fully explored so that an equitable distribution of cost can be developed. Clearly, the intended beneficiaries of this environmental regulation should pay their fair share of the cost that water companies will incur to comply with the final regulation. It is just not equitable to make the customers of water utilities bear the entire cost burden.

As stewards of the state's water resources and environment, Connecticut's water companies have been committed to numerous efforts to protect the state's water resources and environment, including open space preservation, forest management, aquifer protection, water quality monitoring and source water protection. We take our responsibility seriously and routinely work with other stakeholders to provide for the stewardship of the water resources of the state.

These proposed regulations are no different in that regard. CWWA and its members supported passage of the legislation that required DEP to promulgate balanced stream flow regulations.

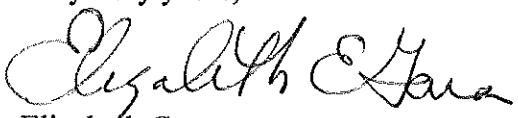
We stand ready to work with stakeholders and policymakers to develop balanced regulations that provide for environmental stewardship and meet the needs of the residents of the state. Although we understand that there are advocates who are eager to have regulations in place, less than 1% of the state's rivers and streams have documented flow impairment issues.

Clearly, we have the time to do this right – to engage in a thoughtful, open dialogue about water allocation and how to balance the competing water resources needs of our state. We do not believe, however, given the fundamental flaws in the proposed regulations, that this can be accomplished within the confines of the formal rulemaking process. To achieve a more balanced, workable approach, we must bring the stakeholders back to the table and address these issues in way that will ensure that aquatic life is not protected to the detriment of human life.

Attached are detailed comments which outline numerous issues in the proposed regulations. However, we caution that unless the fundamental concerns with the proposed regulations are addressed - the impact on available public water supplies, the cost of compliance and the need to strike an appropriate balance – we will continue to vigorously oppose the proposed regulations.

Thank you for the opportunity to comment.

Very truly yours,



Elizabeth Gara
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3 Attachments
Concerns
Recommendations
Summary of Survey

AREAS OF CONCERN

IMPACT ON SAFE YIELD, MARGIN OF SAFETY & AVAILABLE SUPPLY

Although the proposed regulations would allow public water suppliers to cut back on some reservoir releases during drought situations, there continue to be serious concerns with the impact of the proposed regulations on safe yield, margin of safety and available supply. By requiring public water suppliers to release significant quantities of water into streams and severely limit groundwater withdrawals, the proposed regulations will negatively affect the amount of public water supplies available for public health and safety and other critical needs. Many of our member utilities assessed the effect of the proposed regulations on safe yield and margin of safety and their findings are very troubling, with reductions in safe yield ranging from 10 – 40 percent. (see attachment III). In short, some communities may run out of water.

REPLACING NEEDED WATER SUPPLIES

In order to meet their obligations to provide a safe, adequate supply of public water to meet the public health and safety needs of the communities they serve, public water suppliers facing decreases in safe yield as a result of the proposed regulations will be required to develop additional sources of supply or pursue interconnections with neighboring utilities. However, developing new reservoirs or well fields, which will cost millions of dollars, may be cost prohibitive in many areas. Moreover, such projects may not even be feasible, given the numerous legal and regulatory hurdles on the state, federal and local levels. In addition, neighboring water utilities may no longer have sufficient supplies to accommodate interconnections with other utilities facing water supply deficits. These difficulties in replacing lost supplies raise very grave concerns about whether these communities will be able to safely and adequately meet existing public needs, let alone provide for future growth and economic development.

INCREASED FREQUENCY AND DURATION OF WATER SUPPLY DROUGHT RESTRICTIONS

We continue to be concerned that customers would be faced with more frequent and longer periods of drought restrictions under the proposed framework. Experience indicates that the public's compliance with water use restrictions wanes when restrictions are frequently imposed or remain in place for long periods of time. Insofar as the Department's calculation of the percentage of safe yield preserved with restrictions in place depends upon a significant reduction in demand, we remain concerned that the anticipated savings from such restrictions is overly optimistic and will never be realized. The proposed regulations must be revised to include provisions to avoid excessive water supply drought frequencies.

COSTLY INFRASTRUCTURE & PERSONNEL CHANGES

In order to make the releases under the draft rule, most utilities would have to modify and upgrade their infrastructure. For example, most utilities indicated that they would have to upgrade release valves to modulate flow volume rather than utilize existing valves which simply open and close, or add additional pipes (smaller and larger) sized to release the range of flows that would be required by the rule. Construction of new wells and gauging stations and the purchase and installation of monitoring equipment were also identified as costs associated with compliance. The magnitude of these capital improvements is likely to be several hundred million dollars.

Most utilities believe that additional personnel would also be needed to calculate the bioperiod releases, maintain gauging stations and release structures and perform the required monitoring and release adjustments. Resources would also be needed to train personnel to perform these new tasks. This could be even more problematic at a time when the legislature is suggesting reducing state funding of existing gauging stations by half as they are now doing.

While the Department has tried to mitigate these financial concerns with the multi-year implementation, the reality is there will be considerable costs that will be borne exclusively by water utility customers at some point. We need to assess what those costs will be and not just assume that since they are deferred they are not as problematic. This is further compounded as our customers will be bearing the costs while there is an intended broader public benefit and other stakeholders who are served by the implementation of the regulations.

Further, until such time as all rivers and streams are classified, flow-impaired reaches identified, and causal factors known, it is premature to impose such a far-reaching regulation. Absent such information, which would allow problem areas to be targeted and effectively mitigated, we run the risk of channeling hundreds of millions of dollars toward compliance for compliance's sake, and missing an opportunity to address aging infrastructure and other defined public health needs,

MORATORIUM ON NEW SERVICE CONNECTIONS

Water utilities continue to be concerned that the proposed stream flow standards will result in a moratorium on new customers, both residential and commercial. Clearly, this would negatively impact the state's already fragile economy by making it difficult to attract and sustain new jobs. Moreover, the significant costs of compliance for municipal water departments, coupled with what is in effect a moratorium on job growth and expected cuts in state aid, clearly places many towns in an untenable position.

COMPLIANCE TIMEFRAMES

While we appreciate the department's efforts to mitigate costs by extending the timeframes for compliance over sixteen years, it appears that the brunt of the impact will be felt when utilities are required to comply with the interim standards, which can be as short as 6 years. For reservoir systems, this means that the need to identify, develop, permit and invest in new sources of supply and infrastructure to meet release requirements will need to be accomplished in six years, which is far too little time for this type of undertaking.

Finally, particularly for some of the smaller water systems, there remains a question of whether they will be able to comply regardless of the timing. For some it just may not be possible, ultimately forcing consolidation of those systems with other nearby entities with adequate supply, assuming that there are nearby systems left with adequate supply. While there may be merits to consolidation of water systems in the state, such consolidation and the extensive infrastructure necessary to integrate merged systems should flow from some comprehensive statewide planning process, not haphazardly triggered as a result of these environmental regulations. For some utilities, there may be no realistic path to compliance, as the nearest utility left with excess water supply may be so far removed as to make an interconnection or consolidation completely unrealistic.

GROUNDWATER WITHDRAWALS

We have carefully reviewed the enabling statute and the legislative history of Public Act 05-142 and it remains our firm belief that the legislature did not intend to regulate existing groundwater withdrawals as proposed in the regulations. Nonetheless, CWWA has acted in good faith to assess the potential impacts of the Department's draft groundwater extraction rule. We recognize the significant effort that staff have put into development of the draft rule, but firmly believe that something as complex as the groundwater/surface interaction between a pumping well and an adjacent surface water body cannot be regulated in the manner proposed. Given the complexity, it is no surprise that a comprehensive and practical rule remains out of reach for stratified drift wells, let alone bedrock and confined aquifers. Moreover, the proposed extraction matrix pays no credence to actual surface water flows, but attempts to drastically reduce withdrawals based solely on time of year.

CWWA members have found a high "failure" rate when assessing the draft groundwater rule against existing well diversions. This suggests current and historic withdrawals would need to be dramatically curtailed to maintain compliance. At the same time, empirical evidence suggests significant environmental degradation has <u>not</u> been occurring as a result of these historic withdrawals. Such arbitrary regulation has the ability to unreasonably limit available supply during critical demand periods and seriously impact public health and safety for no demonstrable environmental benefit. Of significant concern are the numerous water supply systems that rely solely on groundwater. The implications of a groundwater rule that severely restricts withdrawals during peak demand season – when alternative supplies and storage are not available – remain especially troubling.

PERMITTED DIVERSIONS

There are a lot of questions regarding the extent to which permitted diversions will be considered exempt under the proposed regulations. Some public water suppliers have been advised that such permitted diversions are exempt. However, it appears that once the permitted diversion is up for renewal, the regulations would be applicable.

RECOMMENDATIONS

A More Balanced Approach

Stakeholder Process

Public Act 05-142 requires DEP to work with various stakeholders to ensure that proposed stream flow regulations reflect the spirit and intent of the discussions that took place in negotiating the enabling legislation. Several CWWA members served on the Commissioner's Advisory Committee and the Policy and Scientific working groups. Additionally, several utilities spent thousands of dollars obtaining sufficient detail on the framework in order to provide DEP and other stakeholders with information on the impact of the preliminary framework developed by DEP on public water supplies.

Unfortunately, the stakeholder process came to an abrupt end and we were surprised to learn that a preliminary draft of the regulations dated May 11, 2009 was submitted to the Office of Policy and Management for its review and consideration. In fact, we had to file a formal Freedom of Information request with the Office of Policy and Management in order to obtain a copy of the proposed regulations. While we understand that the Uniform Administrative Procedures Act does not require proposed regulations to be distributed prior to formal publication in the *Connecticut Law Journal*, given the enormous difficulty in crafting regulations that balance protections for aquatic life while providing for public health, safety, agriculture, economic development and other critical needs, the legislature clearly recognized the importance of involving stakeholders in the regulation-writing process.

Inasmuch as the proposed regulations will result in a dangerous drop in public water supplies and impose hundreds of millions of dollars of costs on public water suppliers and their customers, clearly the proposed regulations have not achieved the balance that the legislature called for in Public Act 05-142. We therefore urge DEP to reconvene the advisory committee and working groups to ensure that the draft regulations are balanced, workable and live up their legislative ideal.

Limited Scope of Documented Flow Impairments

According to DEP's own data, less than one percent of the rivers and stream miles in Connecticut have documented flow impairment issues. Despite the relatively limited scope of low flow impairments, the proposed regulations impose strict release requirements and groundwater withdrawal limitations on every river and stream in Connecticut. We recommend that DEP first focus on ways of addressing concerns with those rivers and streams with documented flow impairment issues. This will provide us with important data that will enable us to develop a more balanced approach to addressing stream flow issues without undermining water supplies needed for public health and safety, economic development and agriculture.

Basin Classification
It is impossible to accurately assess the cost and impact of the proposed regulations because the release requirements and groundwater withdrawals are tied to the classifications, which have not been done. Rather than implement costly regulations based on untested assumptions, new stream flow regulations should be developed following a review and classification of each water supply basin in the state and prioritization of known areas of concern. By first classifying and prioritizing basins, policymakers and stakeholders will be able to accurately assess the impacts of the proposed regulations on public health and safety, cost, economic development and other factors.

The classification process allows for public comment and possible re-classification of stream systems and information and knowledge gained during the later stages of the classification process may impact classifications that were conducted earlier in the process. Clearly considerations for compliance and options to meet future water supply needs will depend on the classification of the basins so having that information at the onset would allow for a better planning process. The continued knowledge gained during this phase of the regulations may also lead to revisions to the proposed release portion of the regulations and all of the regulated community should be subject to that portion of the regulations at the same time.

Groundwater Withdrawal
CWWA recommends that given the unknowns with the impact of the rule on groundwater withdrawals and the lack of legislative authority under PA 05-142 to regulate existing groundwater withdrawals, that DEP not proceed with any regulation governing existing groundwater withdrawals at this time. Rather, DEP should complete an assessment of the few locations where groundwater withdrawals might have the potential to measurably impact critical flows in adjacent surface waters (again, such as a Fenton River-type setting), and work collaboratively with the operators of such diversions to minimize and mitigate further impact. The Department should also quantify the regulations' impacts on non-impoundment surface water supplies prior to proceeding with a draft regulation.

Off-Ramps
Notably, the Act authorizes the commissioner to provide in the regulations for special conditions or exemptions for (1) extreme economic hardships or other circumstances, (2) agricultural diversions, (3) a water quality certification related to a Federal Energy Regulatory Commission (FERC) license, or (4) as necessary *to allow a public water system to meet its obligations under state regulations*. We therefore recommend that additional off ramps should be provided based on the overall reduction to a system's safe yield and/or margin of safety, and the resulting ability to develop an additional source of supply within that drainage basin. Specifically, there should be provisions that allow for an alternative requirement or off ramp for public water suppliers if compliance with the standard results in a reduction in available supply to a level that is below the DPH required margin of safety.

The potential environmental impacts created by the development of additional sources of supply can be avoided by an off ramp which allows a reduced release and should therefore be considered. The intent of the regulations may be to address this issue through individual flow

management plans. If so, the regulations should define the criteria and requirements related to flow management plans so that the regulated community would have some ability to assess the feasibility and cost of developing a flow management plan, and ensure that flow management plans can be applied uniformly throughout the state. It is essential that the regulations provide a process that encourages (i.e., requires) all stakeholders to come to the table if there is a management plan being developed so that the burden does not fall exclusively to the public water supplier who would have no authority or control over other participants.

In addition to the off ramps to reduce the releases due to certain drought triggers being in effect, additional off ramps should be provided to reduce the releases based on some measurable environmental benefit achieved. If the desired environmental benefit derived by the proposed releases can be achieved by a reduced release, then an off ramp should be provided to reduce the stream flow release. For instance, due to factors such as physical habitat characteristics, more flow in some streams may not result in an improved fish community. Significant reductions in reservoir water levels during the summer months could cause reservoirs to destratify and result in lethal water temperatures for downstream cold water fish species. In these instances, an off ramp that allows a reduced stream flow release may result in the same or better biodiversity and environmental health as the larger release. The same overall benefit to the environment can be achieved and the resulting environmental impacts created by the development of additional sources of supply can be avoided.

Equity - Compliance Costs

It is evident that compliance with the regulations will be extremely costly and the current structure appears to drive all those costs towards the public water suppliers to ultimately be borne by their customers and the communities they serve. As a matter of public policy, the issue of cost fairness and equity needs to be assessed and other options more fully explored so that an equitable distribution of cost can be developed. Clearly the intended beneficiaries of this environmental regulation should pay their fair share of the cost that water companies will incur to comply with the final regulation.

Sec. 26-141b-2. Definitions - Run of River Dams

DEP's earlier framework indicated that dams operated in instantaneous run of river mode with no withdrawals from the reservoir would be considered exempt from the scope of the proposed stream flow regulations. However, the definitions of "run of river dam" included in the proposed regulations are somewhat limited. For example, the definition of run of river operation provides that outflow from the reservoir is equal to inflow on an instantaneous basis. CWWA believes that the definition should be modified to clarify that the run of river exemption applies to all dams from which direct consumptive withdrawals are not being made. In addition, the regulations should clarify that a reservoir which is kept in service as a standby or emergency supply qualifies as a run of river dam exempt from the release requirements until such time as it is used for active water supply.

Sec. 26-141b-7. Flow Management Compacts

Flow management compacts are intended to allow the development of release/withdrawal rules using site specific science. However, the requirements for obtaining an exemption for a flow management compact under Section 26-141b-7 are extremely onerous and do not provide a workable alternative approach for compliance. In fact, under the regulations, diverters would face more stringent demand management requirements that those complying with the presumptive standards. For example, the regulations require that the plan demonstrates that "all dams and other structures subject to the Stream Flow Standards and Regulations are addressed by the Plan." Even more troubling, flow management plans are required to demonstrate that "BMPs are implemented to minimize alteration of the natural flow pattern including but not limited to conservation and demand management practices." These requirements will certainly discourage flow management compacts as a compliance option.

Sec. 26-141b-8(c)(1). Recordkeeping: daily amount of water diverted or released.

The recordkeeping and monitoring requirements are unduly burdensome and should be modified. For example, the proposed regulations require daily monitoring of all affected streams regardless of size, which would require additional personnel and monitoring equipment with little benefit to the environment. CWWA recommends that flow monitoring be limited to two times per month. In addition, we agree with the comments submitted by the South Central Connecticut Regional Water Authority that a minimum of 5 business days after the 1st and 15th of each month be allowed to make release adjustments to allow adequate time for staff to review data and make changes and avoid the costly need to dedicate staff on weekends and holidays.

Exemptions – Small Watershed Areas

We strongly recommend that there be an outright exemption for small watershed areas of three square miles or less. This would significantly reduce the cost for structural improvements and the ongoing operating expenses associated with maintenance of stream flows into small intermittent streams which are generally of limited habitat value. In addition, we are concerned that the proposed regulations fail to exempt streams that are naturally intermittent, ephemeral, or have natural flows that are otherwise too low to create a sustainable aquatic habitat. We also recommend that the regulations include exemptions for internal watershed diversions and small reservoir storage to watershed ratio.

Revise Fiscal Note

We urge DEP to revise the fiscal note on the proposed regulations to more accurately reflect the costs associated with the stream flow regulations. Given staff cuts, it is implausible that the department can classify the basins, review dam modification applications, review flow management compacts, diversion permit applications, etc. within existing appropriations. In addition, the fiscal note fails to address the additional costs that will be incurred by other state agencies with cognizance over public water suppliers. As indicated in the comments of the state Department of Public Health, they will require additional resources in order to revise water supply plans and assess impacts on safe yield and margin of safety. The state Department of Public Utility Control, the state Office of Consumer Counsel and the Office of Policy and Management and we would think the Department of Environmental Protection itself will also

incur additional costs resulting from increased rate applications, drought management plans, etc. The fiscal note also fails to accurately reflect the costs that will be imposed on municipalities. Municipal water departments will incur millions of dollars in order to modify infrastructure and distribution systems and develop new water supply sources. Moreover, all towns and cities will incur significant costs stemming from increased water rates and fire protection charges.

Small Business Regulatory Impact and Regulatory Flexibility Analysis

Under Public Act 09-19, state agencies are required to evaluate the cost impact to small businesses regarding the adoption of any proposed regulations. However, the small business regulatory impact and regulatory flexibility analysis fails to accurately reflect the direct and indirect costs faced by businesses as a result of the proposed regulations. At a minimum, businesses of all sizes and types will see increased costs due to increased water rates. In addition, businesses in some areas of the state will not be able to expand operations because of insufficient water supplies. Businesses that divert more than 50,000 gpd will face considerable compliance costs.

SUMMARY OF SURVEY OF PUBLIC WATER SUPPLIERS

CWWA requested its members to assist us in assessing the impact of the proposed regulations on public water supplies. Below is a summary of responses to the survey focusing on 1) Impact on Safe Yield, Margin of Safety and Available Supplies; and 2) Cost of modifying structures and developing new sources of supply.

I. Impact on Safe Yield, Margin of Safety and Available Supplies – Analysis (Based on assumption that water supply sources would be located on Class 3 streams)

Aquarion Water Co. –Our analyses show that 10 – 30 per cent of our reservoir supplies will be lost as a result of these regulations. The impact on groundwater withdrawals will be more site specific but is expected to range from no impact to complete summer withdrawal prohibitions.

Avon Water – Avon would see a drop in average day safe yield from groundwater supplies of 26%.

Colchester Water Dept. – Our safe yield may be reduced by approximately 10 per cent and will need to bring an existing bedrock well on line to make up for lost supply. However, should the town need more than the estimated additional 10 percent reduction, additional sources of supply or interconnections with a nearby system will be required. However, the nearest interconnect opportunity, Norwich Public Utilities, has estimated a 20% drop in safe yield as a result of these regulations meaning they will not have excess water for sale to Colchester.

Connecticut Water Co. – The impact on safe yield would vary by system (CWC owns and operates 60 separate water systems). Analysis of groundwater systems (either wholly or partially dependent) suggests some large systems could experience a significant (greater than 20%) margin of safety deficit during maximum month demand periods. Although it varies by system, we would need to replace lost supply capacity by up to several million gallons per day. As an example, the loss to our Guilford System would be around 3 MGD, or some 38% of the current supply available.

Danbury Public Utilities – Danbury would see a 5% reduction in average day safe yield for existing surface water supplies and a 63% reduction in safe yield for existing groundwater supplies for a net safe yield loss of 13%. A safe yield loss of 13% will result in a margin of safety at or near 1.0, resulting in a moratorium on both additional customers and planned expansions by existing customers, which would have a severe economic impact to the Danbury region.

Manchester Water Dept. – Our consultant reviewed the effect the proposed regulation would have on margin of safety and found that the loss in safe yield from the Lydall reservoirs and Buckingham reservoir could be as much as 100%, and essentially become unusable during the drier months of the year. In addition, two of our ten wells would have over a 90% reduction in maximum yield. Depending on their location, loss in production from our other wells would range from 0 – 67%.

The Metropolitan District (MDC) – Given a projected reduction in our margin of safety from a current 31% to 7% in 2012, its ability to serve its existing customer base and its ability to accommodate future needs will be severely compromised.

Meriden Water Dept. – Meriden would see approximately a 12 % reduction in average day safe yield from surface supplies. No loss from ground water supplies as long as Quinnipiac River Flow Management Plan qualifies as an exemption. As Meriden is in the Quinnipiac River basin, development of additional sources does not appear to be an option. Additional supply would have to be brought in from other areas.

Norwalk 1st - We have not conducted a detailed analysis but the ground water limits would prevent us from meeting peak day, and possibly maximum month demands. The margin of safety would be reduced by 10 to 20% and result in a supply deficit. We would need to replace lost supply capacity by approximately 200 to 600 MG per year.

Southington Water Dept. - Depending on how the regulation impacts my expired Well #9 Diversion permit, I will either have an impact to my MMADD and MDD MOS (will be significantly below 1.15), or if the rule applies to the expired permit more immediately, the impact will be to ADD, MMADD and MDD MOS the day the regulation applies. To make up for the loss of supply for our MDD, we would need 4 MGD of supply if Well 9 falls under the Stream flow regulations. During the period of time Well 9 is not under stream flow, we would need 1.7 MGD to supply our MDD. These numbers are based on our needs in 2010.

So. Central CT Regional Water Authority - Based on the assumption that all of our water supply sources would be located on Class 3 streams it is estimated that our overall safe yield would be reduced by about 11% (from 76.7 MGD to 68.6 MGD) and that our margin of safety would be reduced from 44% to 29%. Demands could not be met during the summer in a portion of our system supplied mainly from groundwater sources without significant distribution system improvements. This analysis does not consider the cumulative impact requirements of the groundwater regulations. Analysis of impacts if some or all streams are assigned to Class 1 or Class 2 has not been performed, but would be significantly worse.

So. Norwalk Electric & Water - Based on hydraulic models prepared on other surface water supplies throughout the state, these regulations as proposed would reduce safe yield by anywhere from 15% to 35%. This would result in the SNEW system being in a supply deficit. SNEW

surface water supplies to areas that would be under severe groundwater withdrawal restrictions under the proposed regulations. We also estimate a cost of $500,000 to install or upgrade gauging facilities to measure and monitor releases and diversion amounts from small stream diversions. If the regulation were modified to not require monitoring at small stream diversion dams, this number would be reduced significantly. These costs are based on SCCRWA's assumption that the streams and rivers in its service area would be classified as Class 3. If they are classified as Class 2 or 1, the potential cost of compliance could exceed $100 million.

South Norwalk Electric & Water–We would have to modify 4 reservoir systems with new valves and operators and construct V-notch weirs for flow measurement, including legal and permitting - $500,000 - $1,000,000. In addition, in order to replace lost supply, we estimate $10M to $15M depending on amount of supply needed, based on previous cost of $5.2M to obtain 0.5 MGD.

Southington Water Dept. - In order to supply 4MGD, we would need to fund upgrades to neighboring utilities in order for them to be able support our demands. We are currently studying the costs for such a tie in, but estimate it to be 4-5 million dollars. We would have to spend $500,000 to $700,000 to modify intakes and add flow monitoring at our reservoirs.

Torrington Water Company - The estimated cost to modify our Reuben Hart Reservoir would be between $300,000 to $400,000. Allen Dam would be between $100,000 to $200,000. In order to replace lost supply, the permitting and construction costs of the required new reservoir are likely to be in the $10,000,000 to $20,000,000 range, or $10 to $20 for each additional gallon of safe yield.

Wallingford - A very preliminary estimate would be approximately $500,000 to modify all four reservoirs. Additional improvements to the system for redundancy due to the decreased margin of safety would also be required and could cost millions of dollars.